



UNITED STATES PATENT AND TRADEMARK OFFICE

W

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/757,915	01/14/2004	Chad Stevens	200210082-1	5129
22879	7590	06/30/2005		
HEWLETT PACKARD COMPANY P O BOX 272400, 3404 E. HARMONY ROAD INTELLECTUAL PROPERTY ADMINISTRATION FORT COLLINS, CO 80527-2400			EXAMINER MARTINEZ, JOSEPH P	
			ART UNIT 2873	PAPER NUMBER

DATE MAILED: 06/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/757,915

Applicant(s)

STEVENS, CHAD

Examiner

Joseph P. Martinez

Art Unit

2873

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 April 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 and 29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-8 and 29 is/are rejected.
- 7) ☒ Claim(s) 5 and 9-13 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1-4, 6-8 and 29 are rejected under 35 U.S.C. 102(e) as being fully anticipated by Schmidt (6512626).

Re claims 1 and 29, Schmidt teaches for example in fig. 1 and 3, a display device comprising: a cell (c) having a side (vertical, horizontal or rounded sides of (c)), the cell containing a suspension fluid (d) and at least one suspension particle (e) dispersed within the suspension fluid, the suspension particle being adapted to migrate in the suspension fluid (col. 3, ln. 39-45) under the influence of an electric field (via a and g);

Art Unit: 2873

and a light waveguide layer (f and c) extending adjacent to at least the side of the cell, the light waveguide layer adapted to conduct light into the cell through the side of the cell (col. 3, ln. 39-40; col. 7, ln. 27-29).

Re claim 6, Schmidt teaches for example in fig. 1 and 3, an electrophoretic display device comprising: a plurality of capsules (c), each capsule having a narrow end and a broad end (col. 5, ln. 1-8), and sides connecting the ends (col. 3, ln. 26), each capsule containing a suspension fluid (d) and a plurality of suspension particles (e) dispersed within the suspension fluid, the suspension particles being adapted to migrate in the suspension fluid (col. 3, ln. 39-45) under the influence of an electric field (via a and g); a light waveguide layer (f and c) surrounding the sides of the capsules and adapted to conduct light along the light waveguide layer (col. 3, ln. 39-40; col. 7, ln. 27-29) and laterally into the capsules through the sides (col. 7, ln. 16-18; col. 7, ln. 38-42; wherein the office interprets the diffusing and distributing the light at an angle to disclose the claimed limitation), the narrow ends of the capsules extending through the light waveguide layer (fig. 3, wherein the office interprets the narrow end to extend through layer c); and electrodes (a and g) supported adjacent to opposite ends of the capsules.

Re claim 7, Schmidt teaches for example in fig. 1 and 3, a method of making a display element comprising: forming a light waveguide layer (f and c) adapted to transmit light along a light path defined by the light waveguide layer (col. 3, ln. 39-40;

col. 7, ln. 27-29); and forming a cell (c) containing a suspension fluid (d) and at least one suspension particle (e) dispersed within the suspension fluid, the suspension particle being adapted to migrate in the suspension fluid (col. 3, ln. 39-45) under the influence of an electric field (via a and g), the cell extending into the light waveguide layer (fig. 3, wherein the office interprets the narrow end to extend through layer c).

Re claim 2, Schmidt further teaches for example in fig. 1, the light waveguide layer has a first surface (portion of c in contact with b) and a first end of the cell (b, wherein the office interprets b to be a portion of the cell) extends beyond the first surface of the light waveguide layer (wherein the office interprets b to extend beyond the surface of c).

Re claim 3, Schmidt further teaches for example in fig. 3, the side tapers outwardly from the first surface toward an opposite second surface.

Re claim 4, Schmidt further teaches for example in fig. 1 and 3, the light waveguide layer extends around the sides of the cell (col. 3, ln. 39-40; col. 7, ln. 27-29; wherein the office interprets c to make up the microcompartment and therefore extends around the sides of the cell).

Re claim 8, Schmidt further teaches for example in fig. 1 and 3, directing light along the light waveguide layer and laterally into the cell through the side of the capsule

(col. 7, ln. 16-18; col. 7, ln. 38-42; wherein the office interprets the diffusing and distributing the light at an angle to disclose the claimed limitation).

Allowable Subject Matter

Claims 5 and 9-13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: the prior art taken alone or in combination fails to anticipate or fairly suggest the limitations of the claims, in such a manner that a rejection under 35 USC 102 or 103 would be proper. The prior art fails to teach a combination of all the claimed features as presented in dependent claims 5 and 9.

Specifically regarding claim 5, Schmidt teaches the state of the art of electrophoretic displays.

But, Schmidt fails to explicitly teach a second end of the cell extends beyond the second surface, as claimed.

Specifically regarding claim 9, Schmidt teaches the state of the art of electrophoretic displays.

But, Schmidt fails to explicitly teach forming a cell includes forming a membrane enclosing the suspension fluid and at least one particle, the method further comprising forming a passageway extending through the light waveguide layer, and positioning the cell in the passageway with a portion of the cell extending beyond the light waveguide layer, as claimed.

Response to Arguments

Applicant's arguments filed 4-15-05 have been fully considered but they are not persuasive.

Re applicant's arguments on p. 6-11, wherein the applicant argues that the examiner applies the wrong definition to waveguide, have been considered, but are not persuasive.

The applicant is relying on the physical properties of the material to achieve the desired function and the office interprets both layers made from the identical material to be able to perform the same function.

Furthermore, the office interprets the teachings of Schmidt to disclose a waveguide and diffuser from identical material and therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to make this portion integral, since it has been held that forming in one piece an article which has formerly been formed in two pieces and put together involves only routine skill in the art. *Howard v. Detroit Stove Works*, 150 U.S. 164 (1893).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph P. Martinez whose telephone number is 571-272-2335. The examiner can normally be reached on M-F 7:00 AM to 3:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Y. Epps can be reached on 571-272-2328. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2873

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JPM
6-24-05



Hung Xuan Dang
Primary Examiner